

by tracking down all of his quotations and allusions. From Plato to Walt Whitman through Shakespeare, Sir Thomas Browne, Keats, Shelley, and the Bible—a mere list of his reading would fill pages!

In addition to his wide reading, there is a diversity that is astonishing, a diversity that carries over to his writing and activities. This remarkable physician, teacher, essayist, lecturer, historian, and bibliographer has books and essays in no less than six departments of the Los Angeles Public Library. One may find, for example, *The Alabama Student and Other Biographical Essays* (New York, 1908) and the pamphlet on *Michael Servetus* (Oxford, 1909) in the Biography and History Room. In the Teachers' Room are his *Old Humanities and the New Science* (Boston, 1920) and "Vocation in Medicine and Nursing," in Basil Mathews' *Essays on Vocation* (Oxford, 1919, pp. 119-128). The Philosophy and Religion Room has *Science and Immortality* (Boston, 1904) and the odd, privately printed volume, *Messages on Healing, Understood to Have Been Dictated by William James, Sir William Osler, Andrew Jackson Davis and Others, and Received by Mrs. Jane Revere Burke, Sitting with Edward S. Martin* (1936). In the Literature and Philology Room are the several anthologies and Osler's *Student Life and Other Essays* (Boston, 1931). In the Science Room, of course, is the *Principles and Practice* in several editions, and there one also may find *Bibliotheca Osleriana* (Oxford, 1929) and *The Evolution of Modern Medicine* (New Haven, 1921). The Periodical Room contains, among others, under general reading, "Burton's Anatomy of Melancholy," in the *Yale Review* (2:251-271, January 1914), "Greek at Oxford" in the *Nation* (91:544-555, December 8, 1910), and "Man's Redemption of Man" in the *American Magazine* (51:246-252, December 1910).

The list is by no means complete. If the Los Angeles Library had them, the *Æquanimitas* volume and *Creators, Transmuters, and Transmitters as Illustrated by Shakespeare, Bacon, and Burton* would certainly be among the literary and philological works. Here, too, the *Alabama Student* might well be placed; for, says Christopher Morley, the essay on Keats "taken with Kipling's wonderful story, *Via Wireless*, tells the student more about that poet than many a volume of biography." And if allusion and quotation are any criterion, any number of his works could be catalogued among works of literature. To choose at random, for instance, *Science and Immortality*: this contains quotations from the Bible (the Books of Job, Esdras, Psalms, Galatians, Isaiah, Ecclesiastes, Acts, Corinthians, and Matthew), from Aristotle's *Ethics*, Plato's *Phaedo* and *Apology*, the *Odyssey*, Horace's *Carmina*, from Terence, Goethe, from Browne's *Religio Medici* and *Hydriotaphia*, from Burton's *Anatomy of Melancholy*, John Donne's *Biathanatos*, Shakespeare's *Midsummer Night's Dream*, Milton's *Areopagitica* and *Eikonoklastes* and *Paradise Lost* and *Hymn to the Nativity*, from Montaigne, from Shelley's *Adonais*, Tennyson's *Maud* and *In Memoriam*, Pater's

Marcus the Epicurean, Stephen Phillips' *Herod*, from the *Rubaiyat of Omar Khayyam*, Jowett on Buddhism, and from Holmes's *Autocrat of the Breakfast Table*. This does not include the mass of allusions made to various literary subjects and characters without actually quoting!

Osler was never all doctor: it could never have fallen to a genius of his stature to be *all* any one thing. His eminence in the scientific realm has done much to obscure his greatness as an author; yet it served at the same time to develop his literary talents. Like Byron, we "hate the author who is *all author*"; such a narrowness is impossible in a man of Osler's great intellect and wide sympathies. The leaven of science in his literary work served to raise it "above the common dough" and to give it specific as well as universal purpose.

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CLINICAL NOTES AND CASE REPORTS

BLOOD BANK: SAN FRANCISCO HOSPITAL*

By J. C. GEIGER, M. D.
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ON December 7, 1939, the Blood Preservation Laboratory (usually referred to as the Blood Bank) officially opened for business at the San Francisco Hospital. The original inauguration of the Blood Bank was made possible by donations coming through the University of California and

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Stanford University Medical Schools. Specifically, the Blood Bank represents a system under which human blood from volunteer donors is tested, certified, and preserved for the preservation of human life. Under the Blood Bank system, human blood is available for immediate use in emergency operations or other cases. Having a Blood Bank set-up to receive deposits permits the drawing of blood and the replacement of equal amounts by relatives or friends of the patients receiving the blood transfusions.

After one year of operation (from December 7, 1939, to December 1, 1940) the Blood Bank is now making it possible to give approximately 170 blood transfusions a month. Previously it was possible to give an average of only about forty blood transfusions a month. Most of these had to be paid for by the Department of Public Health at a cost of \$25 per blood donor.

The following summary shows the monthly payments to blood donors by the hospital during the six months just preceding the opening of the Blood Bank:

| | |
|-----------------|------------|
| July | \$1,075.00 |
| August | 575.00 |
| September | 1,050.00 |
| October | 1,050.00 |
| November | 875.00 |
| December | 175.00 |

During the calendar year 1940 only about \$100 per month has been expended for professional blood donors in the few cases where patients required blood types not available at the time in the storehouse of the Blood Bank. During the first year of operation, blood was taken from 1,747 individuals and transfusions given to 1,670. The variety of cases assisted by blood transfusions covers a wide field, including acute surgical emergencies, obstetrical cases, accident, shock, chronic anemia, and many cases throughout the hospital needing human blood to recover from the effects of disease, accident, and injury. Every division of the hospital shared in the benefits of the expanded Blood Bank program. These divisions include men's and women's surgery, and all the surgical specialties, obstetrics and gynecology, urology, the contagious disease wards and the tuberculosis division.

The program of the Blood Bank has also set up a plan to provide for giving blood transfusions to patients in the various emergency hospitals of the San Francisco Emergency Hospital Service. This provides for those cases urgently in need of human blood, where it is felt that the patient is too ill to risk immediate removal to a private hospital or to the San Francisco City and County Hospital.

It is of particular interest to present a brief summary of the financial report of the Blood Bank for the first year:

| | |
|---|------------|
| <i>Contributions by the Department of Public Health for the Year Ending November 30, 1940</i> | |
| Equipment | \$1,036.40 |
| Materials and supplies | 1,371.49 |
| Salaries | |
| One female orderly, twelve months.. | 1,160.00 |
| One technician, nine months..... | 930.00 |
| | <hr/> |
| | \$4,497.89 |

| | |
|--|-------------|
| <i>Donated to the Blood Bank</i> | |
| (a) By the Rosenberg Foundation, salary of chief technician (July 1, 1939 to June 30, 1941) | 4,800.00 |
| Operating expenses and sup- plies | 1,200.00 |
| (b) By Cutter Laboratory, Berke- ley, California, supplies..... | 750.00 |
| (c) By an anonymous donor..... | 100.00 |
| | <hr/> |
| | \$11,347.89 |

This cost does not actually represent the total cost of carrying on transfusions in the hospital, inasmuch as the complete program includes the services of a number of nurses and doctors who assist in the work. However, the cost of the operation of the Blood Bank proper may be conservatively estimated to be \$11,347.89.

COMMENT

Several interesting points have developed during the first year of the operation of the Blood Bank:

1. Of the 1,747 blood samples taken from prospective donors:
 - (a) Forty-eight, or 2.7 per cent, showed a positive Wassermann.
 - (b) Twelve, or 0.6 per cent, showed a history of malaria.
 - (c) Twelve, or 0.6 per cent, clotted or hemolyzed.
 - (d) Seven, or less than 0.5 per cent, of the blood specimens drawn were not used, due to unsatisfactory condition of the blood.
 - (e) Only 165, or 10 per cent, of recipients showed any reactions, and no deaths resulting from transfusions (even the slightest disturbance was called a reaction).
2. Ten prospective donors preferred to pay \$25 each for their friends or relatives, instead of offering their own blood for transfusion purposes.
3. The financial saving to the city of San Francisco for the first year of operation of the Blood Bank may be conservatively estimated as follows:

| | |
|---|-------------|
| (a) Donation—Rosenberg Foundation..... | \$ 6,000.00 |
| (b) Donation—Cutter Laboratories..... | 750.00 |
| (c) Volunteer blood donors (approximately 1,700 at \$25 each)..... | 42,500.00 |
| (d) Anonymous donor | 100.00 |
| Total..... | <hr/> |
| | \$49,350.00 |
| (e) Human lives saved..... | |
| (f) Shortened hospital terms of 1,670 patients at approximately \$6 per day..... | |

SUMMARY

In reviewing the results of the first year's operation of the Blood Bank, it is appropriate to express our sincere thanks to the Rosenberg Foundation, to the Cutter Laboratories of Berkeley, California, and to an anonymous donor of \$100, for financial assistance in launching the Blood Bank on its career. It is also in order to thank all who have had a part in making the first year of operation such a stimulating success.

It is with a great source of satisfaction that we look forward to a second year with the hope that the high efficiency of the Blood Bank may even be improved, and that the benefits derived by the weak, the injured, and the sick may be extended and enlarged in ever-increasing measure.
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